

### **Abstract**

A device for metering and controlling fluid flow includes a variable orifice and is configured to use a pressure sensor. The device includes a fluid flow conduit having at least one planar inner wall that extends along a portion of the fluid flow conduit 5 length, and an element having a linear edge configured to mate with the at least one planar inner wall of the fluid flow conduit. The element is movable in a direction transverse to an axis of the conduit between an open position wherein fluid flows through the conduit and a closed position wherein the element substantially shuts off fluid flow in the conduit.